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REHABILITATION GUIDELINES FOR ROTATOR CUFF REPAIRS
TYPE III PROTOCOL
MASSIVE TEARS (> 5 cm)
Aaron M. Bott M.D.

The rehabilitation guidelines are presented in a criterion based progression. General time frames are given for reference to the average, but individual patients will progress at different rates. Specific time frames, restrictions and precautions may also be given to protect healing tissues and the surgical repair/reconstruction. This is a protocol designed for **massive tears** that measured greater than five centimeters at surgery. This protocol is also indicated in situations where cuff tissue quality was exceedingly poor. Progression should be dictated by time as outlined in the protocol as well as the patient's symptoms. If at any time the patient is experiencing significant discomfort with the recommended exercises, the protocol may need to be slowed down.

Phase I Surgery to 2 Weeks

Appointments	Physician: 10-14 days postoperatively Physical Therapy: 3-5 days postoperatively 1-2x/week
Guidelines	• Shoulder Immobilizer: -Required for soft tissue healing for 8 weeks/Should be worn at all times except for ROM exercises • No passive or active motion • Other exercises may be utilized at the therapist's discretion within the restrictions of the protocol
Range of Motion Exercises	• Active elbow, forearm, and wrist ROM exercises immediately • Active cervical spine and scapular ROM exercises immediately • Pendulum exercises immediately
Strengthening Exercises	• Grip strengthening exercises/Postural exercises
Aerobic Conditioning	• Walking/Stationary bike • Avoid impact aerobic conditioning
Modalities	• Cryotherapy
Progression Criteria	• 2 weeks postop

ROTATOR CUFF REPAIR
TYPE III PROTOCOL
Phase II 2 to 6 Weeks Postop
Aaron M. Bott M.D.

Appointments	Physician: 10-14 days and 6 weeks postoperatively Physical Therapy: 1-2x/week
Guidelines	• Shoulder Immobilizer: -Required for soft tissue healing for 8 weeks -May be removed for ROM exercises -May be removed during the 8th week in safe environments -Should be worn at night from weeks 0-6 -D/C completely 8 weeks after surgery • No active motion x 8 weeks • Avoid active abduction until 10 weeks after surgery • Other exercises may be utilized at the therapist's discretion within the restrictions of the protocol
Range of Motion Exercises	• Active elbow, forearm, and wrist ROM exercises immediately • Active cervical spine and scapular ROM exercises immediately • Passive and active-assisted shoulder ROM exercises in all planes -Weeks 3-4: Flexion to 110º ER (arm at side) to 30º IR to 45º Exception: ER only to 20° if subscapularis repair was done -Weeks 5-6: Flexion to 130º ER (45º abduction) to 30º IR (45º abduction) to 50º • Gentle shoulder mobilizations as needed
Strengthening Exercises	• Submaximal shoulder isometrics in internal and external rotation in non-provocative positions (exception: no internal rotation isometrics if subscapularis repair was done) • Scapular strengthening with arm in neutral • Grip strengthening exercises • Postural exercises • Core strengthening
Aerobic Conditioning	• Walking/Stationary bike • Avoid impact aerobic conditioning
Modalities	• Cryotherapy
Progression Criteria	• 6 weeks postop • Flexion 130º/ER 45º (arm at side)

ROTATOR CUFF REPAIR
TYPE III PROTOCOL
Phase III 6 to 12 Weeks Postop
Aaron M. Bott M.D.

Appointments	Physician: 6 weeks and 12 weeks postoperatively Physical Therapy: 1x/1-2 weeks
Guidelines	• May initiate active motion in at 8 weeks • Avoid active abduction x 10 weeks • Avoid external resistance in abduction and scaption x 12 weeks • Other exercises may be utilized at the therapist's discretion within the restrictions of the protocol
Range of Motion Exercises	• Passive, active-assisted, and active ROM in all cardinal planes – assessing scapular rhythm • Sleeper stretches/posterior glides for internal rotation • Cervical spine and scapular active ROM • Gentle shoulder mobilizations as needed
Strengthening Exercises	• OKC supine shoulder rhythmic stabilizations at 90º of elevation • Gentle CKC shoulder and scapular stabilization drills • Isotonic internal and external rotation strengthening with therabands or weights -Begin at 0º abduction -Gradually increase abduction as strength improves -Progress posterior cuff strengthening slowly and pain-free • Short arc PNF patterns • Scapular strengthening • Core strengthening • Trunk and hip mobility exercises
Aerobic Conditioning	• Walking • Stationary bike • No swimming, treadmill, running, or jumping
Modalities	• Cryotherapy
Progression Criteria	• 12 weeks postop • Full active motion • Full IR/ER strength with arm at side

ROTATOR CUFF REPAIR
TYPE III PROTOCOL
Phase IV 12 Weeks to 6 Months Postop
Aaron M. Bott M.D.

Appointments	Physician: 12 weeks and 6 months postoperatively Physical Therapy: 1x/2-3 week
Guidelines	• Months 3-4: -Initiate gradual supraspinatus and infraspinatus strengthening -Avoid long lever arms strengthening exercises -All exercises and activities to remain non-provocative and low to medium velocity -Avoid activities where there is a risk of falling/increased stress applied to the arm -Advance proprioceptive and dynamic neuromuscular control retraining -Correct postural dysfunctions with work and sport specific tasks -Develop strength and control for movements required for work or sport • Months 4-5: -Progress gradually into provocative exercises by beginning with low velocity, known movement patterns -Develop work capacity cardiovascular endurance for work and/or sport • Months 5-6: -Progress gradually into sport/work specific movement patterns -Develop provocative exercises in high velocity, multidirectional movement patterns • Other exercises may be utilized at the therapist's discretion within the restrictions of the protocol
Range of Motion Exercises	• Posterior glides/sleeper stretches for posterior capsular tightness • More aggressive ROM if limitations are still present • Stretching for patient specific muscle imbalances
Strengthening Exercises	• Months 3-4: -Rotator cuff strengthening at 90º of abduction and in overhead positions -Scapular strengthening and dynamic neuromuscular control in OKC and CKC positions -Eccentric strengthening -Core and lower body strengthening • Months 4-6: -Rotator cuff strengthening at 90º of abduction and in provocative positions and work/sport specific positions -Endurance and velocity specific exercises -Core and lower body strengthening -Initiate sport-specific programs (throwing, swimming, overhead racket, etc.)
Aerobic Conditioning	• Months 3-5: -Walking, stationary bike, stairmaster, and running. No swimming • Months 5-6: -Return to sport-specific conditioning regimen
Modalities	• Cryotherapy
Progression Criteria/Return to Work	• Full active ROM • Full shoulder/upper extremity strength • Dynamic neuromuscular control with multi-plane activities without instability